

[Document Title] Abstract

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[Object]

The use of the scanning means such as a galvanometer mirror or a polygon mirror might cause a problem that the scanning speed or the irradiation state is not uniform in the positions at the surface irradiated with the laser where the scanning starts and the scanning ends. Moreover, the vibration of the galvanometer mirror might make the scanning width meander.

[Solution]

In the present invention, it is characterized in that the galvanometer mirror rotates in one direction when the galvanometer mirror is used. The spot can be scanned on the irradiated surface at a more constant speed by rotating the galvanometer mirror and by using the inertia. Moreover, it is preferable to make the galvanometer mirror heavy because the inertia becomes higher so that the spot is scanned at a more constant speed. In addition, in the polygon mirror of this invention, it is characterized in that the mirrors are arranged so as not to contact each other because a change time of the scanning position between the mirrors is provided. By moving the irradiated object with timing together when the laser light is not irradiated, the laser process can

be performed efficiently.